

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

This declaration is original.

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

MODIFICATION OF SURFACES USING BIOLOGICAL RECOGNITION EVENTS

the specification of which (I authorize Choate, Hall & Stewart to check one of the following, three choices, and fill in the blanks, if applicable):

_____ is attached hereto.

 X was filed on May 19, 1999 as Application Serial No. _____ and amended on _____ (if applicable).

_____ was filed as PCT international application No. _____, on and was amended under PCT Article 19 on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledged the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

Priority Claimed

_____ (Number)	_____ (Country)	_____ (Day/Month/Year/Filed)	<u> Yes </u>	<u> No </u>
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_____ (Number)	_____ (Country)	_____ (Day/Month/Year/Filed)	<u> Yes </u>	<u> No </u>
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I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of

America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Provisional Application(s):

Application Number	Filing Date	Status
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Other Application(s)

Application Number	Filing Date	Status
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Application Number	Filing Date	Status
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PCT Applications designating the United States:

(PCT Appl. No.)	(U.S.S.N.)	(status-patented, pending, abandoned)
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I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:
Sam Pasternack, Reg. No. 29,576; David J. Powsner, Reg. No. 31,868; Brenda Herschbach Jarrell, Reg. No. 39,223; Kevin M. Tormey, Reg. No. 41,351; Karoline K.M. Shair, Reg. No. 44,332; and Elizabeth E. Nugent, Reg. No. 43,839.

Address all telephone calls to Sam Pasternack at telephone no. (617) 248-5000.

Address all correspondence to Sam Pasternack, Choate, Hall & Stewart, Exchange Place, 53 State Street, Boston, Massachusetts 02109-2891.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of first inventor: Robert S. Langer

Inventor's signature: _____ Date: _____

Residence: 77 Lombard Street, Newton, MA 02158

Citizenship: USA

Post Office Address: MIT, Dept. of Chemical Engineering, Room E25-342, Cambridge, MA

Full name of second inventor: Scott M. Cannizzaro

Inventor's signature: _____ Date: _____

Residence: 24 Tracey Road, Cotuit, MA

Citizenship: USA

Post Office Address: MIT, Dept. of Chemical Engineering, Room E25-342, Cambridge, MA

Full name of third inventor: Bernhard G. Mueller

Inventor's signature: _____ Date: _____

Residence: Griemstrasse 41, CH-4055 Basel, Switzerland

Citizenship: Switzerland

Post Office Address: MIT, Dept. of Chemical Engineering, Room E25-342, Cambridge, MA

Full name of fourth inventor: Kevin Shakesheff

Inventor's signature: _____ Date: _____

Residence: 44 South Street, Draycott, Derby, United Kingdom

Citizenship: U.K. Citizen

Post Office Address: MIT, Dept. of Chemical Engineering, Room E25-342, Cambridge, MA

ASSIGNMENT

WHEREAS, We, **Robert S. Langer** of Newton, Massachusetts; **Scott M. Cannizzaro** of Cotuit, Massachusetts; **Berhard G. Mueller** of Basel, Switzerland; and **Kevin Shakesheff** of Draycott, Derby U.K., having invented certain new and useful improvements in **MODIFICATION OF SURFACES USING BIOLOGICAL RECOGNITION EVENTS** for which we will make application for United States Letters Patent; and

WHEREAS, **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, having offices at **77 Massachusetts Avenue, Cambridge, Massachusetts**, and its successors and assigns (collectively hereinafter called "the Assignee"), is desirous of acquiring my entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledge, I do hereby sell assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive right, title and interest in and to said invention and in and to said application and all patents which may granted therefore, and all divisions, reissues, substitutions, continuations; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as my interest is concerned, to the said ASSIGNEE of my entire right, title and interest.

I also hereby sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world, including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention, and all rights to register said invention in appropriate registries; and I further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

I hereby further agree that I will communicate to said ASSIGNEE, or to its successors, assigns and legal representative, any facts known to me respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
_____ this _____ day of _____, 1999.

Robert S. Langer

STATE OF _____
SS.

COUNTY OF _____

Before me this _____ day of _____, 1999, personally appeared **Robert S. Langer** known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Notary's Seal Here]

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NOTARY PUBLIC
My Commission Expires:

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
_____ this _____ day of _____, 1999.

Scott M. Cannizzaro

STATE OF _____
SS.

COUNTY OF _____

Before me this _____ day of _____, 1999, personally appeared **Scott M. Cannizzaro** known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Notary's Seal Here]

.....
NOTARY PUBLIC
My Commission Expires:

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
_____ this _____ day of _____, 1999.

Bernhard G. Mueller

TOWN OF _____.

JAPAN

Before me this _____ day of _____, 1999, personally appeared **Bernard G. Mueller** known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Notary's Seal Here]

.....
NOTARY PUBLIC
My Commission Expires:

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
_____ this _____ day of _____, 1999.

Kevin Shakesheff

STATE OF _____.
SS.

COUNTY OF _____.

Before me this _____ day of _____, 1999, personally appeared **Kevin Shakesheff** known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Notary's Seal Here]

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NOTARY PUBLIC
My Commission Expires: